

Banshee

Wingspan:900mm

Length:950mm

Empty Weight:790G[w/o Battery]



⚠ 电调使用说明：

1. 本款产品使用了新的40A V2版电调，新增“降落油门反推刹车”功能。

2. 此电调有二条连接线，分别为：油门（Throttle）信号控制线及油门反推刹车（Reverse Brake）控制线。

3.连接说明：

-油门信号控制线（Throttle）

插入接收机油门通道，控制油门大小。

-油门反推刹车（Reverse Brake）控制线

插入接收机任意空闲二程通道。飞机降落着地后，在遥控器上，通过切换此对应通道开关，开启“油门反推刹车”功能。

警告：

1. 油门反推刹车（Reverse Brake）控制线必须插入接收机进行连接，否则，电调将不会启动。

2.模型飞机离地后，在飞行过程中，不能开启“油门反推刹车”功能，否则会丧失动力，导致严重飞行事故。

⚠ ESC Instruction：

1.This product uses the new 40A V2 ESC, and adds the "Reverse throttle deceleration after landing" function.

2.This ESC has two connecting cables: "Throttle" signal control cable and "Reverse Brake" control cable.

3.Connection Instruction

- "Throttle" signal control cable insert into the throttle channel of receiver to control the throttle size.

- "Reverse Brake" control cable insert into any free two-way switch channel of receiver. After the plane lands on the ground, switch the corresponding channel switch on the radio to turn on the "Reverse throttle deceleration" function.

Note:

1."Reverse Brake" control cable must insert into the receiver for connection, otherwise the ESC will not start.

2.After the model aircraft is off the ground, during the flight, the "throttle reverse thrust" function cannot turn on,otherwise the forward power will be lost, and resulting in a serious flight accident.



EN 1~10

中 11~20

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Thank you for purchasing the Freewing 64mm EDF jet Banshee. It is made of high-density EPO material. Before the product leaves the factory, the spraying and decals steps have been completed, and the degree of completion is high. This product also provides two versions of PNP and ARF Plus for selection.

Freewing "Banshee" electric jet is a new 64mm ducted aircraft built again after the Stinger 64 was launched for 12 years. In terms of appearance, the light and flat nose is perfectly combined with the streamlined body, making it stylish and concise. The fluorescent green theme color, with black and white mottled gradient style honeycomb pattern and gray lines, has a unique visual impact, which not only shows the personality, but also effectively enhances the recognition during the flight. In terms of structure, this product adopts a modular structure design, and the assembly of major components is completed through plastic structural parts and screws, which is easy to maintain and update accessories.

Through the summary of the use of previous products and the accumulation of design experience, the Wingspan of the Banshee is set as the captain respectively: 900mm / 950mm. Compared with the conventional 64-ducted products, the size has been increased to improve the flight quality of the product. The main wing adopts a leading edge sawtooth design layout, which further enhances the lateral stability of the product at low speed and elevation attitude. In the process of research and development, repeated testing of various parameters, as well as multiple optimizations and modifications, made the Banshee meet the performance that a basic sports machine should have. The PNP version of Banshee is pre-installed with a 4S 14.8V 64mm12-blade out-runner power system, which is full of power and has an average speed of 152KPH (95MPH). During the take-off, the directional stability is good, and the roll distance is about 20 meters. During the flight, the action responds quickly, and the operation process is soft and linear.

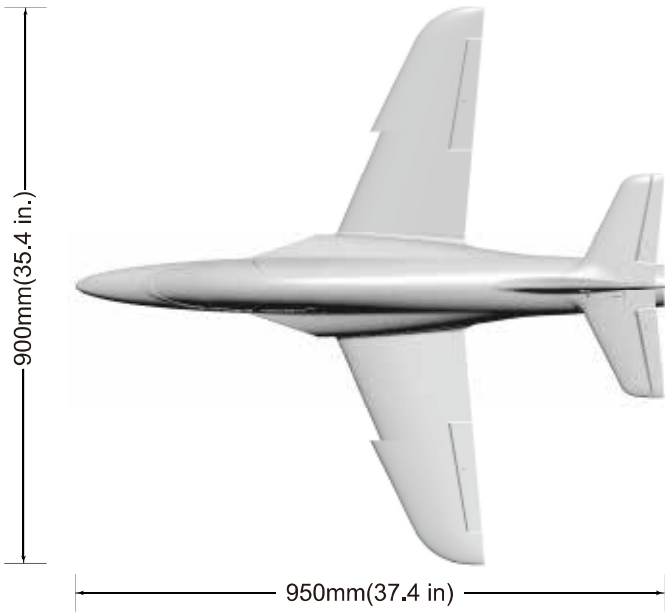
Under the same conditions, during the horizontal turn, the altitude loss is small. In the case of mastering the essentials of relevant flying movements, Banshee can easily complete common easy and difficult movements including "side flying". The fixed landing gear made of $\Phi 3$ mm diameter carbon steel is simple and durable. During the landing process, the landing gear has an appropriate degree of softness and hardness. With a little practice and adaptation, the bouncing phenomenon during the landing process can be reduced or even avoided, and the landing gear can smoothly land and glide.

Maneuverability, controllability and stability are the striking features of this brand new Banshee electric model aircraft. It is very suitable to use this cost-effective product to practice related flight actions. I hope you like it!(Note: When using 6S 22.2V 64mm 12-blade out-runner power system, the average speed is 175KPH (109MPH). You can consult and purchase this upgraded power pack through our official or official designated channels)

⚠ NOTE: This is not a toy. Not for children under 14 years. Young people under the age of 14 should only be permitted to operate this model under the instruction and supervision of an adult. Please keep these instructions for further reference after completing model assembly.

Note:

- 1.This is not a toy! Operator should have a certain experience, beginners should operate under the guidance of professional players.
- 2.Before install, please read through the instructions carefully and operate strictly under instructions.
- 3.Cause of wrong operation, Freewing and its vendors will not be held responsible for any losses.
- 4.Model planes' players must be on the age of 14 years old.
- 5.This plane used the EPO material with surface spray paint, don't use chemical to clean, otherwise it will damage.
- 6.You should be careful to avoid flying in areas such as public places, high-voltage-intensive areas, near the highway, near the airport or any other place where laws and regulation clearly prohibit.
- 7.You cannot fly in bad weather conditions such as thunderstorms, snows....
- 8.Model plane's battery, don't allowed to put in everywhere. Storage must ensure that there is no inflammable and explosive materials in the round of 2M range.
- 9.Damaged or scrap battery should be properly recycled, it can't discard to avoid spontaneous combustion and fire.
- 10.In flying field, the waste after flying should be properly handled, it can't be abandoned or burned.
- 11.In any case, you must ensure that the throttle is in the low position and transmitter switch on, then it can connect the lipo-battery in aircraft.
- 12.Do not try to take planes by hand when flying or slow landing process. You must wait for landing stop, then carry it.

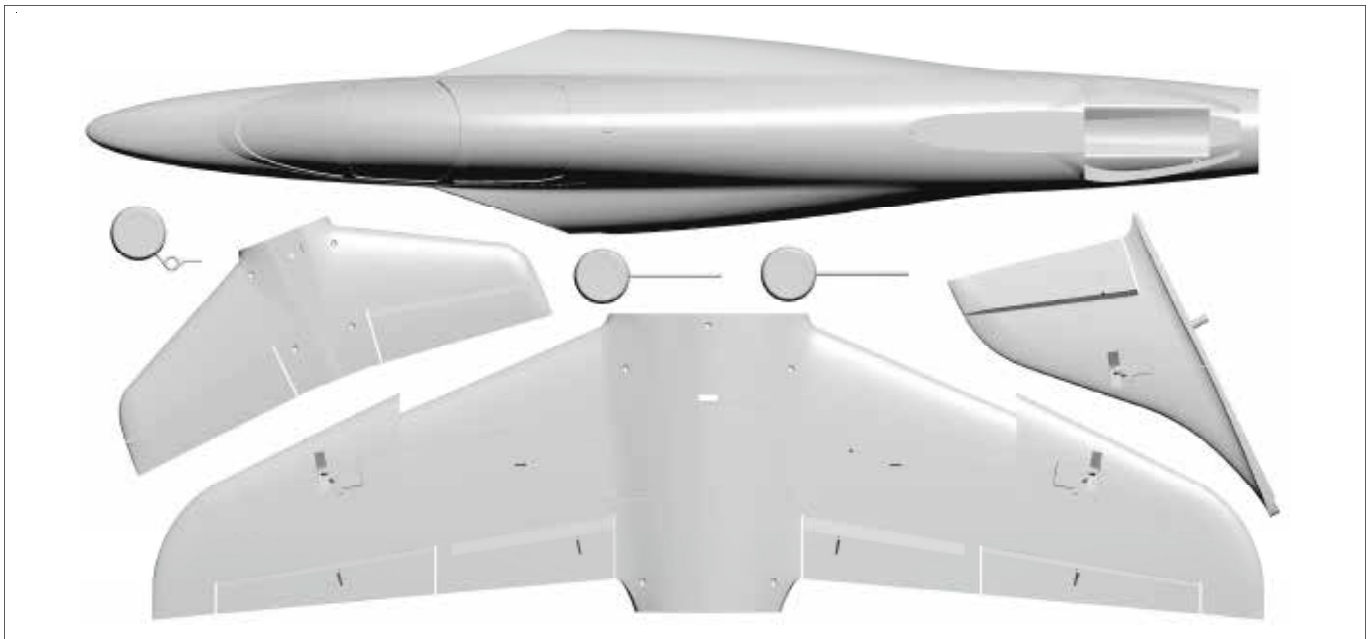


Standard Version

- Wingload: 91.8 g/dm²
- Wing Area: 11 dm²
- Motor: 2840-2850KV O/R Motor
- Servo: 9g Digital plastic servo ×8
- ESC: 40A Brushless(Thrust Reverse function)
- Ducted fan: 64mm 12-blade fan
- Weight: 790g(w/o Battery)
- Li-Po Battery:4S 2200-2600mAh
- Landing gear:Fixed landing gear

⚠ Note: The parameters in here are derived from test result using our accessories. If use other accessories, the test result will be different. Any problem since of using other accessories, we are not able to provide technical support.

Package List



Different equipment include different spareparts. Please refer to the following contents to check your sparepart list.

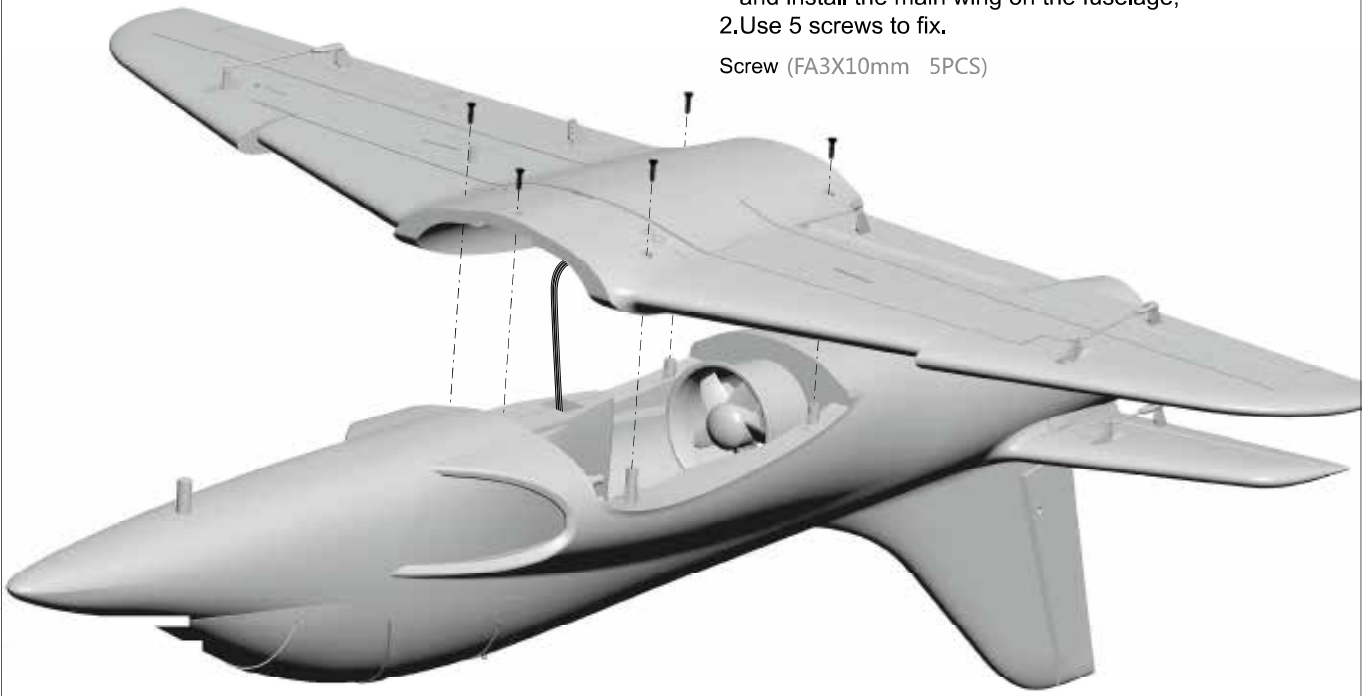
No.	Name	PNP	ARF Plus	No.	Name	PNP	ARF Plus
1	Fuselage	Pre-installed all electronic parts	Pre-installed servo	5	Wheel	✓	✓
2	Main wing	Pre-installed all electronic parts	Pre-installed servo	6	Pushrod	✓	✓
3	Horizontal tail	Pre-installed all electronic parts	Pre-installed servo	7	Manual	✓	✓
4	Vertical tail	Pre-installed all electronic parts	Pre-installed servo				

Install Main wing

As the photo show :

- 1.Insert the aileron servo cable to the battery compartment and install the main wing on the fuselage;
- 2.Use 5 screws to fix.

Screw (FA3X10mm 5PCS)



Install Vertical Stabilizer

As the photo show :

- 1.Lock the rudder on the elevator by screw.

Screw (FA3x10mm 1PCS)

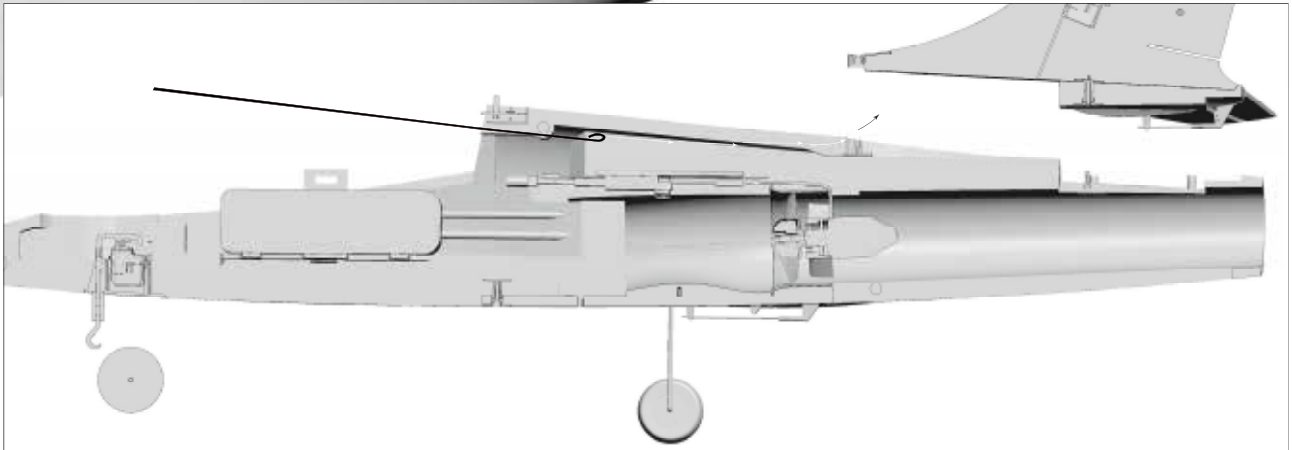
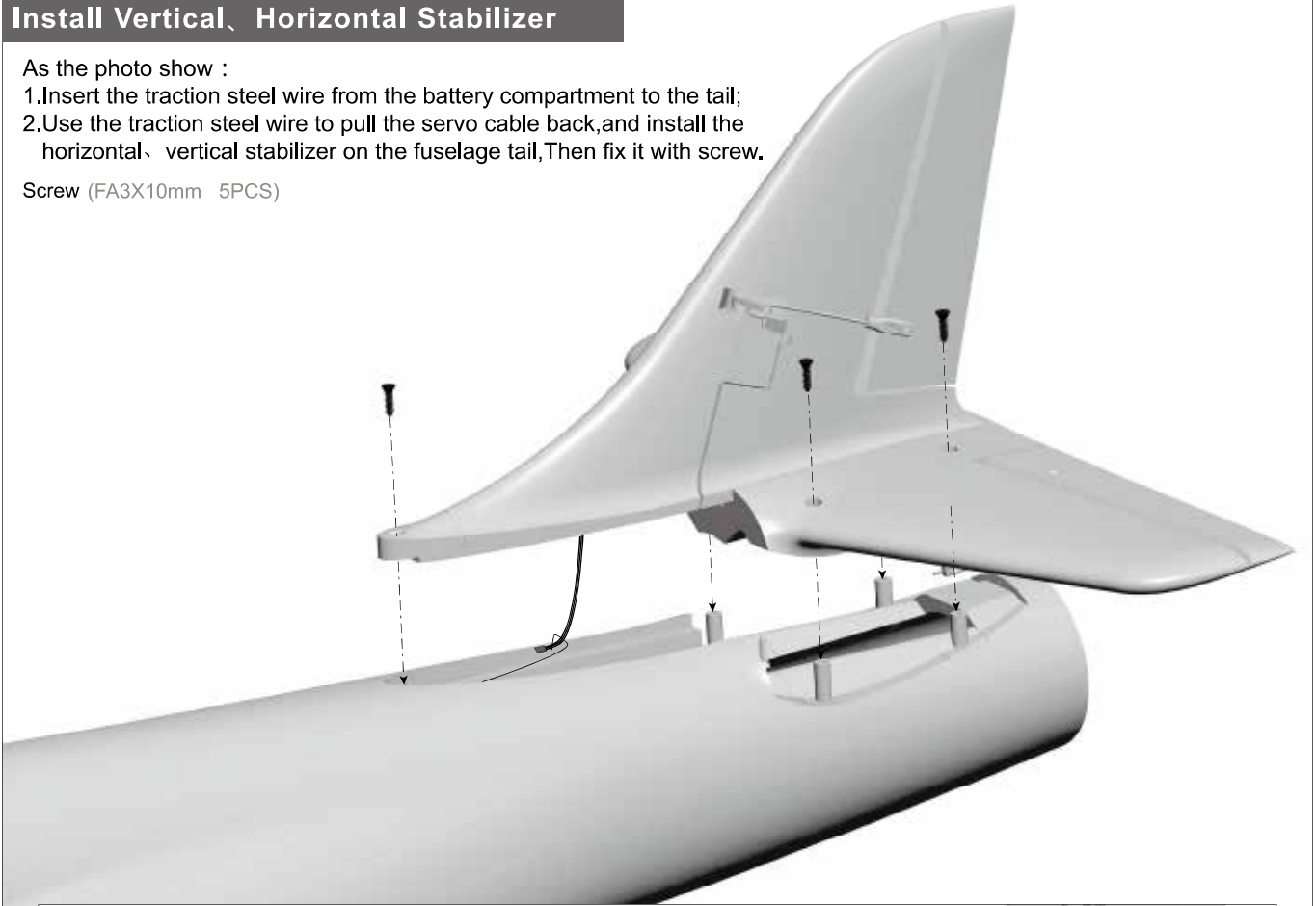


Install Vertical、Horizontal Stabilizer

As the photo show :

- 1.Insert the traction steel wire from the battery compartment to the tail;
- 2.Use the traction steel wire to pull the servo cable back,and install the horizontal、vertical stabilizer on the fuselage tail,Then fix it with screw.

Screw (FA3X10mm 5PCS)



Install Nose Landing Gear

As the photo show :

- 1.Insert the nose landing gear set first,
and then fix the nose wheel with the screw.

Screw (M4X4mm 1PCS)



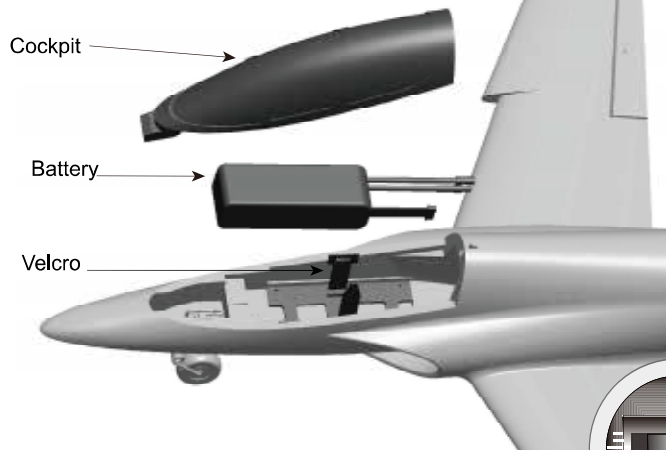
Install Rear Landing Gear

As the photo show :

- 1.Insert the rear landing gear into the rear landing gear fixed mount.

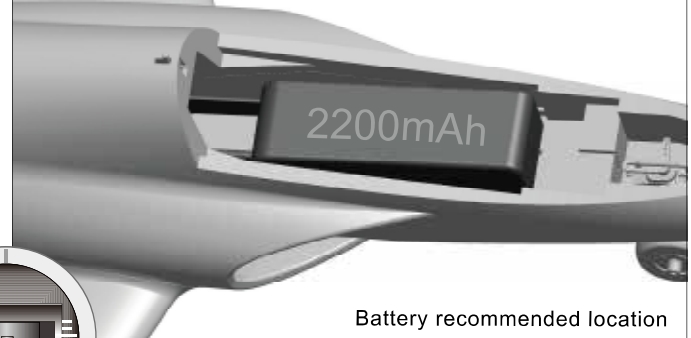


Install Battery



Battery cabin size:
L=210 W=65 H=60(mm)

Battery size: 4S 2200mAh
Battery weight :226g



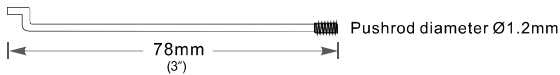
Battery recommended location

Before connecting the battery and receiver, please switch on the transmitter power and make sure the throttle stick is in the lowest position. Bind your receiver to your transmitter according to your transmitter's instruction manual.

We recommend the following LiPo battery:
4S 14.8V 2200mAh~4S 14.8V 2600mAh
Discharge rate of C ≥ 35C

Pushrod instructions

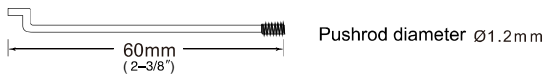
Aileron pushrod length



Aileron pushrod mounting hole



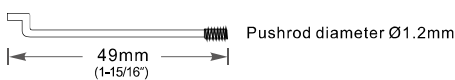
Flap pushrod length



Flap pushrod mounting hole(Inside)



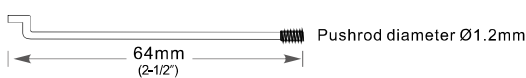
Elevator pushrod length



Elevator pushrod mounting hole



Rudder pushrod length



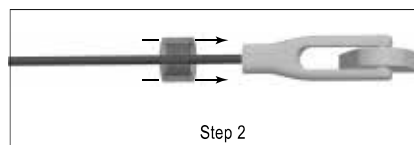
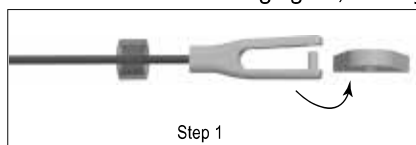
Rudder pushrod mounting hole



Important additional notes

The Y-type clevis used in this product is equipped with a transparent silicone ring for secondary reinforcement, which can effectively prevent the clevis from accidentally loosening.

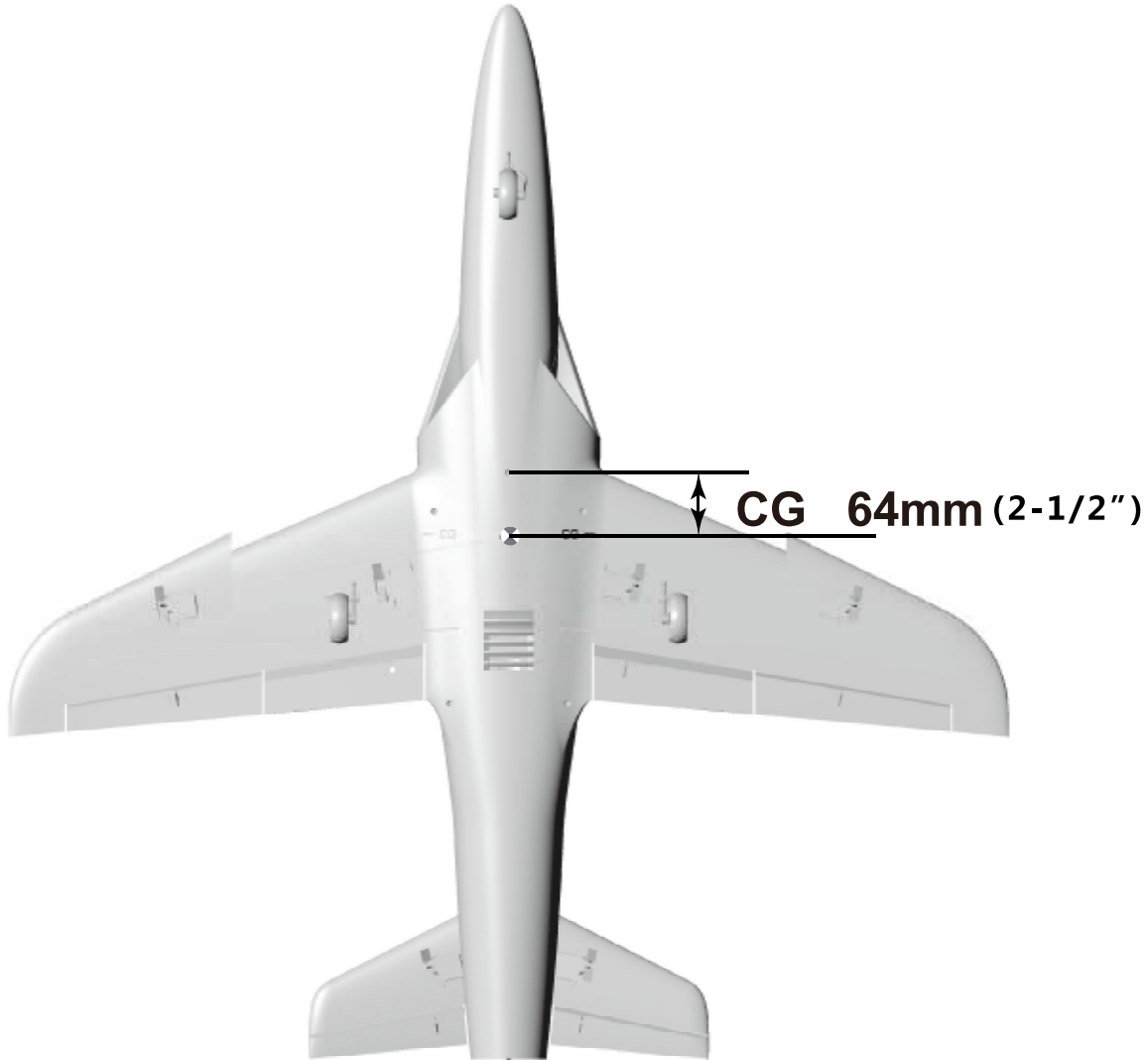
As shown in the following figure, when you buckle the clevis into the control surface horn, use the silicone ring to cover the clevis.



Center of Gravity

Correct Center of Gravity ("CG") is critical for enabling safe aircraft stability and responsive control. Please refer to the following CG diagram to adjust your aircraft's Center of Gravity.

- Depending on the capacity and weight of your chosen flight batteries, move the battery forward or backward to adjust the Center of Gravity.
- If you cannot obtain the recommended CG by moving the battery to a suitable location, you can also install a counterweight to achieve correct CG. However, with the recommended battery size, a counterweight is not required. We recommend flying without unnecessary counterweight.



ESC Instruction

1. This product uses the new 40A V2 ESC, and adds the "Reverse throttle deceleration after landing" function.
2. This ESC has two connecting cables: "Throttle" signal control cable and "Reverse Brake" control cable.
3. Connection Instruction
 - "Throttle" signal control cable insert into the throttle channel of receiver to control the throttle size.
 - "Reverse Brake" control cable insert into any free two-way switch channel of receiver. After the plane lands on the ground, switch the corresponding channel switch on the radio to turn on the "Reverse throttle deceleration" function.

Note:

1. "Reverse Brake" control cable must insert into the receiver for connection, otherwise the ESC will not start.
2. After the model aircraft is off the ground, during the flight, the "throttle reverse thrust" function cannot turn on, otherwise the forward power will be lost, and resulting in a serious flight accident.

Control Direction Test

After installed the plane, before flying, we need a fully charged battery and connect to the ESC, then use radio to test and check that every control surface work properly.

Aileron

Stick Left



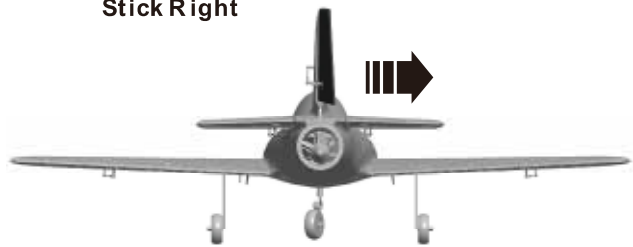
Stick Right

**Rudder**

Stick Left



Stick Right

**Elevator**

Stick down



Stick up

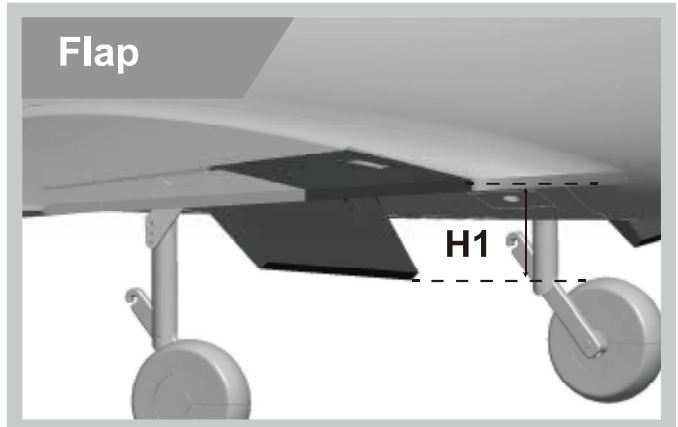
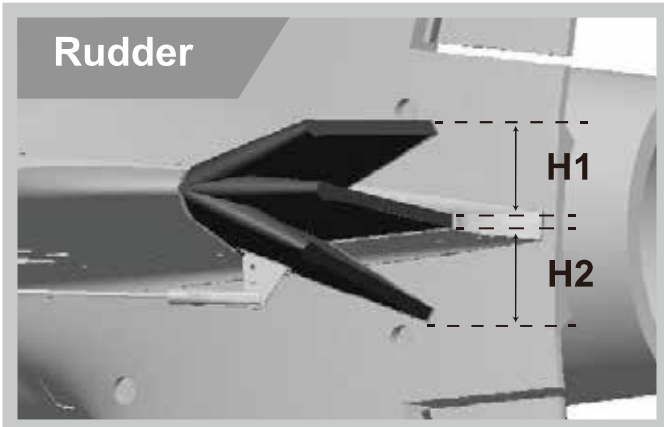
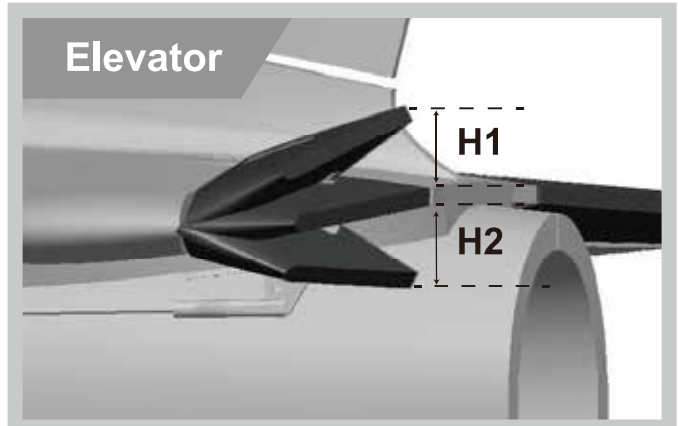
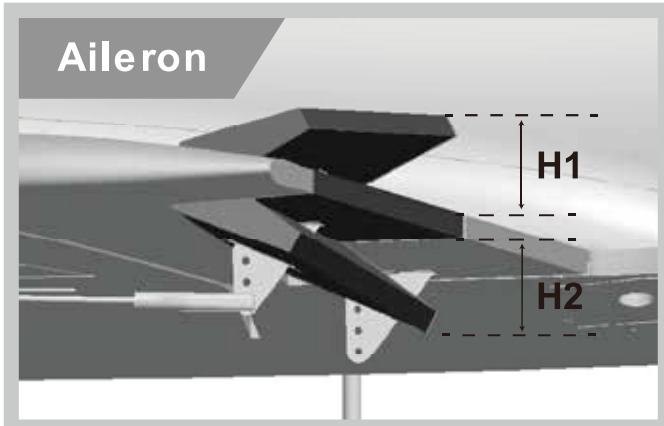
**Flaps**

Flaps down



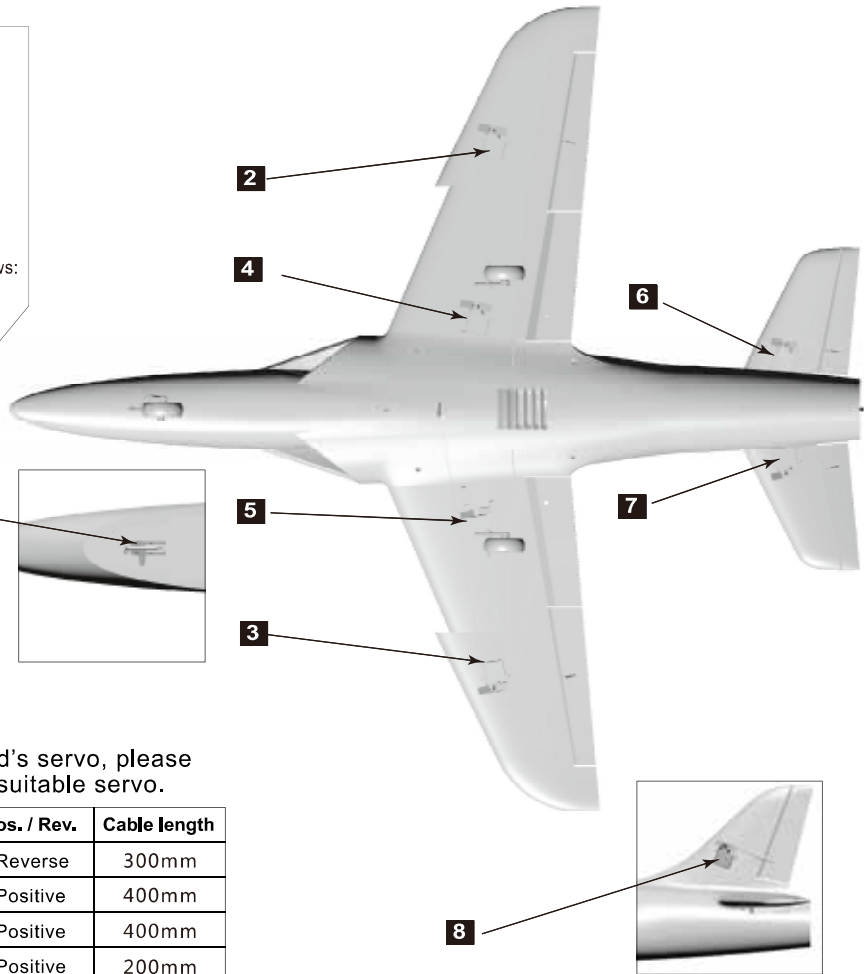
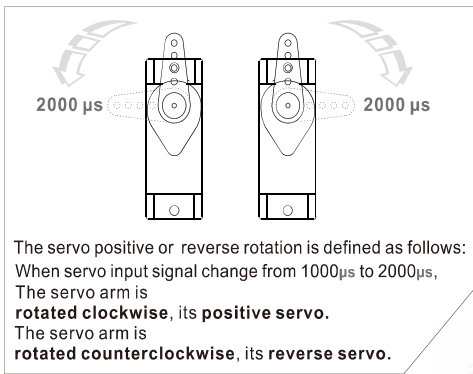
Dual Rates

According to our testing experience, use the following parameters to set Aileron/Elevator Rate. Program your preferred Exponential % in your radio transmitter. We recommend using High Rate for the first flight, and switching to Low Rate if you desire a lower sensitivity. On successive flights, adjust the Rates and Expo to suit your preference.



	Aileron (Measured closest to the fuselage)	Elevator (Measured closest to the fuselage)	Rudder (Measured from the bottom)	Flaps
Low Rate	H1/H2 9mm/9mm D/R Rate : 60%	H1/H2 17mm/17mm D/R Rate : 75%	H1/H2 24mm/24mm D/R Rate : 80%	H1 11mm
High Rate	H1/H2 12mm/12mm D/R Rate : 80%	H1/H2 23mm/23mm D/R Rate : 100%	H1/H2 31mm/31mm D/R Rate : 100%	H1 24mm

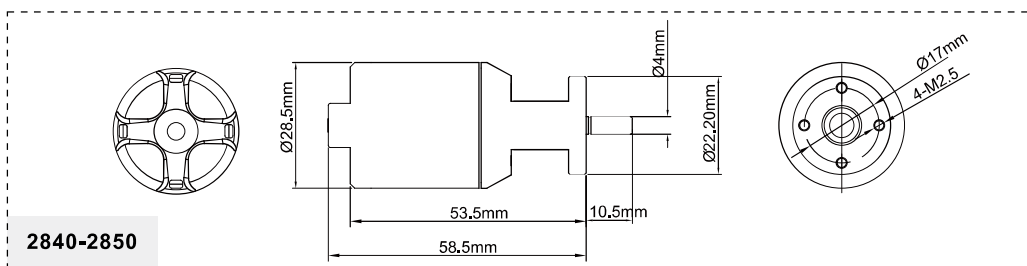
Servo Direction



If you need to purchase another brand's servo, please refer to the following list to choose a suitable servo.

Position	Servo regulation	No.	Pos. / Rev.	Cable length
Nose gear steering servo	9g plastic servo	1	Reverse	300mm
Aileron(L)	9g plastic servo	2	Positive	400mm
Aileron(R)	9g plastic servo	3	Positive	400mm
Flap(L)	9g plastic servo	4	Positive	200mm
Flap(R)	9g plastic servo	5	Reverse	200mm
Elevator(L)	9g plastic servo	6	Positive	600mm
Elevator(R)	9g plastic servo	7	Reverse	600mm
Rudder	9g plastic servo	8	Positive	600mm

Motor Specification



2840-2850KV brushless motor use 4S 14.8V lipo battery and 40A ESC.

⚠ Note: If you need other motor to use, please refer to the dimension shown on the left to select your motor, to make sure that the motor you purchased can install successfully.

Model	KV Value	Volute (V)	Current (A)	Pull (g)	RPM	Weight (g)	No Load Current	Propeller	ESC
2840-2850KV	2850RPM/V	14.8	40	1350	42180	145	2.7A	64mm Ducted Fan	40A



Dongguan Freewing Electronic Technology Ltd
HK Freewing Model International Limited

Add.: FeiYi Building, face to Labor Bureau, Fumin Middle Road, Dalang Town,
Dongguan City, Guangdong Province, China

Web: <http://www.sz-freewing.com> www.freewingmodel.com

Email: freewing@sz-freewing.com

Tel: 86-769-82669669 Fax: 86-769-82033233

东莞市飞翼电子科技有限公司
香港飞翼模型国际有限公司

地址: 广东省东莞市大朗镇富民中路402-408号飞翼楼四楼

Web: <http://www.sz-freewing.com> www.freewingmodel.com

Email: freewing@sz-freewing.com

Tel: 86-769-82669669 Fax: 86-769-82033233

